> This Raw Listing contains the General Information
> Section and up to first 5 pages.

```
 1   <110> APPLICANT: LIU, CHUAN-FA
 2         FEIGE, ULRICH
 3         CHEETHAM, JANET
 4         BOONE, THOMAS CHARLES
 5   <120> TITLE OF INVENTION: MODIFIED PEPTIDES AS THERAPEUTIC AGENTS
 6   <130> FILE REFERENCE: A-527
 7   <140> CURRENT APPLICATION NUMBER: US/09/428,082
 8   <141> CURRENT FILING DATE: 1999-10-22
 9   <150> EARLIER APPLICATION NUMBER: 60/105,371
10   <151> EARLIER FILING DATE: 1998-10-23
11   <160> NUMBER OF SEQ ID NOS: 1133
12   <170> SOFTWARE: PatentIn Ver. 2.1
13   <210> SEQ ID NO 1
14   <211> LENGTH: 684
15   <212> TYPE: DNA
16   <213> ORGANISM: HUMAN
17   <220> FEATURE:
18   <221> NAME/KEY: CDS
19   <222> LOCATION: (1)..(684)
20   <400> SEQUENCE: 1
21         atg gac aaa act cac aca tgt cca cct tgt cca gct ccg gaa ctc ctg    48
22         Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
23          1               5                  10                  15
24         ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa ccc aag gac acc ctc    96
25         Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
26                        20                  25                  30
27         atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gtg gac gtg agc   144
28         Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
29                        35                  40                  45
30         cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag   192
31         His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
32                50                  55                  60
33         gtg cat aat gcc aag aca aag ccg cgg gag gag cag tac aac agc acg   240
34         Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
35          65                  70                  75                  80
36         tac cgt gtg gtc agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat   288
37         Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
38                        85                  90                  95
39         ggc aag gag tac aag tgc aag gtc tcc aac aaa gcc ctc cca gcc ccc   336
40         Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
41                       100                 105                 110
42         atc gag aaa acc atc tcc aaa gcc aaa ggg cag ccc cga gaa cca cag   384
43         Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
44                       115                 120                 125
```

```
45          gtg tac acc ctg ccc cca tcc cgg gat gag ctg acc aag aac cag gtc   432
46          Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
47              130             135             140
48          agc ctg acc tgc ctg gtc aaa ggc ttc tat ccc agc gac atc gcc gtg   480
49          Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
50          145             150             155             160
51          gag tgg gag agc aat ggg cag ccg gag aac aac tac aag acc acg cct   528
52          Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
53                          165             170             175
54          ccc gtg ctg gac tcc gac ggc tcc ttc ttc ctc tac agc aag ctc acc   576
55          Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
56              180             185             190
57          gtg gac aag agc agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg   624
58          Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
59              195             200             205
60          atg cat gag gct ctg cac aac cac tac acg cag aag agc ctc tcc ctg   672
61          Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
62              210             215             220
63          tct ccg ggt aaa                                                   684
64          Ser Pro Gly Lys
65          225
66   <210> SEQ ID NO 2
67   <211> LENGTH: 228
68   <212> TYPE: PRT
69   <213> ORGANISM: HUMAN
70   <400> SEQUENCE: 2
71          Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
72              1               5               10              15
73          Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
74                          20              25              30
75          Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
76                          35              40              45
77          His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
78              50              55              60
79          Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
80              65              70              75              80
81          Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
82                          85              90              95
83          Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
84                          100             105             110
85          Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
86                          115             120             125
87          Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
88              130             135             140
89          Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
90          145             150             155             160
91          Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
92                          165             170             175
93          Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
94              180             185             190
```

```
 95            Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
 96                     195                 200                 205
 97            Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 98                     210                 215                 220
 99            Ser Pro Gly Lys
100            225
101   <210> SEQ ID NO 3
102   <211> LENGTH: 18
103   <212> TYPE: PRT
104   <213> ORGANISM: Artificial Sequence
105   <220> FEATURE:
106   <223> OTHER INFORMATION: Description of Artificial Sequence:PEGYLATED
107         PEPTIDE
108   <400> SEQUENCE: 3
109         Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala
110           1               5                  10                  15
111         Arg Ala
112   <210> SEQ ID NO 4
113   <211> LENGTH: 18
114   <212> TYPE: PRT
115   <213> ORGANISM: Artificial Sequence
116   <220> FEATURE:
117   <223> OTHER INFORMATION: Description of Artificial Sequence:PEGYLATED
118         PEPTIDE
119   <400> SEQUENCE: 4
120         Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala
121           1               5                  10                  15
122         Arg Ala
123   <210> SEQ ID NO 5
124   <211> LENGTH: 794
125   <212> TYPE: DNA
126   <213> ORGANISM: Artificial Sequence
127   <220> FEATURE:
128   <223> OTHER INFORMATION: Description of Artificial Sequence:Fc-TMP
129   <220> FEATURE:
130   <221> NAME/KEY: CDS
131   <222> LOCATION: (39)..(779)
132   <400> SEQUENCE: 5
133         tctagatttg ttttaactaa ttaaaggagg aataacat atg gac aaa act cac aca  56
134                                                     Met Asp Lys Thr His Thr
135                                                       1               5
136         tgt cca cct tgt cca gct ccg gaa ctc ctg ggg gga ccg tca gtc ttc    104
137         Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
138                     10                  15                  20
139         ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc cgg acc cct    152
140         Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
141                     25                  30                  35
142         gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac cct gag gtc    200
143         Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
144                 40                  45                  50
```

145	aag	ttc	aac	tgg	tac	gtg	gac	ggc	gtg	gag	gtg	cat	aat	gcc	aag	aca	248
146	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	
147	55				60				65							70	
148	aag	ccg	cgg	gag	gag	cag	tac	aac	agc	acg	tac	cgt	gtg	gtc	agc	gtc	296
149	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	
150				75				80					85·				
151	ctc	acc	gtc	ctg	cac	cag	gac	tgg	ctg	aat	ggc	aag	gag	tac	aag	tgc	344
152	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	
153				90				95				100					
154	aag	gtc	tcc	aac	aaa	gcc	ctc	cca	gcc	ccc	atc	gag	aaa	acc	atc	tcc	392
155	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	
156			105				110					115					
157	aaa	gcc	aaa	ggg	cag	ccc	cga	gaa	cca	cag	gtg	tac	acc	ctg	ccc	cca	440
158	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	
159			120				125				130						
160	tcc	cgg	gat	gag	ctg	acc	aag	aac	cag	gtc	agc	ctg	acc	tgc	ctg	gtc	488
161	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	
162	135				140					145					150		
163	aaa	ggc	ttc	tat	ccc	agc	gac	atc	gcc	gtg	gag	tgg	gag	agc	aat	ggg	536
164	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	
165				155				160				165					
166	cag	ccg	gag	aac	aac	tac	aag	acc	acg	cct	ccc	gtg	ctg	gac	tcc	gac	584
167	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	
168				170				175				180					
169	ggc	tcc	ttc	ttc	ctc	tac	agc	aag	ctc	acc	gtg	gac	aag	agc	agg	tgg	632
170	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	
171			185				190					195					
172	cag	cag	ggg	aac	gtc	ttc	tca	tgc	tcc	gtg	atg	cat	gag	gct	ctg	cac	680
173	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met	His	Glu	Ala	Leu	His	
174			200				205				210						
175	aac	cac	tac	acg	cag	aag	agc	ctc	tcc	ctg	tct	ccg	ggt	aaa	ggt	gga	728
176	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser	Pro	Gly	Lys	Gly	Gly	
177	215				220					225					230		
178	ggt	ggt	ggt	atc	gaa	ggt	ccg	act	ctg	cgt	cag	tgg	ctg	gct	gct	cgt	776
179	Gly	Gly	Gly	Ile	Glu	Gly	Pro	Thr	Leu	Arg	Gln	Trp	Leu	Ala	Ala	Arg	
180				235				240					245				
181	gct	taatctcgag	gatcc														794
182	Ala																

```
183  <210> SEQ ID NO 6
184  <211> LENGTH: 247
185  <212> TYPE: PRT
186  <213> ORGANISM: Artificial Sequence
187  <220> FEATURE:
188  <223> OTHER INFORMATION: Description of Artificial Sequence:Fc-TMP
189  <400> SEQUENCE: 6
190       Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu
191        1               5                   10                  15
192       Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu
193                       20                  25                  30
194       Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser
```

```
195                    35                    40                    45
196        His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu
197            50                    55                    60
198        Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr
199        65                    70                    75                    80
200        Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn
201                              85                    90                    95
202        Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro
203                   100                   105                   110
204        Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln
205                   115                   120                   125
206        Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val
207             130                   135                   140
208        Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
209        145                   150                   155                   160
210        Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
211                              165                   170                   175
212        Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
213                   180                   185                   190
214        Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
215             195                   200                   205
216        Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
217             210                   215                   220
218        Ser Pro Gly Lys Gly Gly Gly Gly Gly Ile Glu Gly Pro Thr Leu Arg
219        225                   230                   235                   240
220        Gln Trp Leu Ala Ala Arg Ala
221                              245
222   <210> SEQ ID NO 7
223   <211> LENGTH: 861
224   <212> TYPE: DNA
225   <213> ORGANISM: Artificial Sequence
226   <220> FEATURE:
227   <223> OTHER INFORMATION: Description of Artificial Sequence:Fc-TMP-TMP
228   <220> FEATURE:
229   <221> NAME/KEY: CDS
230   <222> LOCATION: (39)..(842)
231   <400> SEQUENCE: 7
232        tctagatttg ttttaactaa ttaaaggagg aataacat atg gac aaa act cac aca   56
233                                                     Met Asp Lys Thr His Thr
234                                                      1                   5
235        tgt cca cct tgt cca gct ccg gaa ctc ctg ggg gga ccg tca gtc ttc    104
236        Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
237                        10                    15                    20
238        ctc ttc ccc cca aaa ccc aag gac acc ctc atg atc tcc cgg acc cct    152
239        Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
240                   25                    30                    35
241        gag gtc aca tgc gtg gtg gtg gac gtg agc cac gaa gac cct gag gtc    200
242        Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
243             40                    45                    50
     aag ttc aac tgg tac gtg gac ggc gtg gag gtg cat aat gcc aag aca    248
```

Line	?	Error/Warning	Original Text
1033	W	"N" or "Xaa" used: Feature required	Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu A
1048	W	"N" or "Xaa" used: Feature required	Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu A
1064	W	"N" or "Xaa" used: Feature required	Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu A
1079	W	"N" or "Xaa" used: Feature required	Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu A
1081	W	"N" or "Xaa" used: Feature required	Xaa Ile Glu Gly Pro Thr Leu Arg Gln Trp L
1094	W	"N" or "Xaa" used: Feature required	Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu A
1096	W	"N" or "Xaa" used: Feature required	Xaa Ile Glu Gly Pro Thr Leu Arg Gln Trp L
1109	W	"N" or "Xaa" used: Feature required	Ile Glu Gly Pro Thr Leu Arg Gln Cys Leu A
1124	W	"N" or "Xaa" used: Feature required	Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu A
1136	W	"N" or "Xaa" used: Feature required	Val Arg Asp Gln Ile Xaa Xaa Xaa Leu
1256	W	"N" or "Xaa" used: Feature required	Gly Arg Val Arg Asp Gln Ile Xaa Xaa Xaa L
1362	W	"N" or "Xaa" used: Feature required	Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Cys
1372	W	"N" or "Xaa" used: Feature required	Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Xaa C
1382	W	"N" or "Xaa" used: Feature required	Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Xaa X
1392	W	"N" or "Xaa" used: Feature required	Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Xaa X
1402	W	"N" or "Xaa" used: Feature required	Cys Thr Leu Arg Glu Trp Leu Xaa Xaa Xaa X
1512	W	"N" or "Xaa" used: Feature required	Cys Xaa Glu Gly Pro Thr Leu Arg Glu Trp L
1522	W	"N" or "Xaa" used: Feature required	Cys Xaa Xaa Glu Gly Pro Thr Leu Arg Glu T
1532	W	"N" or "Xaa" used: Feature required	Cys Xaa Glu Gly Pro Thr Leu Arg Glu Trp L
1542	W	"N" or "Xaa" used: Feature required	Cys Xaa Xaa Glu Gly Pro Thr Leu Arg Glu T
1639	W	"N" or "Xaa" used: Feature required	Tyr Xaa Cys Xaa Xaa Gly Pro Xaa Thr Trp X
1649	W	"N" or "Xaa" used: Feature required	Tyr Xaa Cys Xaa Xaa Gly Pro Xaa Thr Trp X
1651	W	"N" or "Xaa" used: Feature required	Cys Xaa Xaa Gly Pro Xaa Thr Trp Xaa Cys X
1664	W	"N" or "Xaa" used: Feature required	Tyr Xaa Cys Xaa Xaa Gly Pro Xaa Thr Trp X
1666	W	"N" or "Xaa" used: Feature required	Xaa Cys Xaa Xaa Gly Pro Xaa Thr Trp Xaa C
1680	W	"N" or "Xaa" used: Feature required	Tyr Xaa Cys Xaa Xaa Gly Pro Xaa Thr Trp X
1769	W	"N" or "Xaa" used: Feature required	Pro Gln Gly Gly Xaa Gly Gly Thr Tyr Ser C
1812	W	"N" or "Xaa" used: Feature required	Pro Gln Gly Gly Ser Ser Lys Xaa Gly Gly T
1871	W	"N" or "Xaa" used: Feature required	Glu Glu Asp Xaa Lys
1886	W	"N" or "Xaa" used: Feature required	Xaa Glu Asp Xaa Lys
1901	W	"N" or "Xaa" used: Feature required	Xaa Ser Asp Xaa Lys
1914	W	"N" or "Xaa" used: Feature required	Glu Glu Asp Cys Lys Xaa Glu Glu Asp Cys L
1927	W	"N" or "Xaa" used: Feature required	Glu Glu Asp Xaa Lys Xaa Glu Glu Asp Xaa L
2120	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
2122	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Thr Trp Xaa Xaa Xaa Xaa X
2124	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa
2304	W	"N" or "Xaa" used: Feature required	Pro Xaa Phe Xaa Asp Tyr Trp Xaa Xaa Leu
3060	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Gln Xaa Tyr Xaa Xaa Xaa
3163	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
3177	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
3189	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Pro Tyr Gln X
3201	W	"N" or "Xaa" used: Feature required	Phe Ala Trp Thr Pro Gly Tyr Trp Gln Xaa T
3213	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Ala Pro Gly Tyr Trp Gln Xaa T
3225	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Val Pro Gly Tyr Trp Gln Xaa T
3237	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
3251	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
3265	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Xaa Trp Tyr Gln Xaa T
3279	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Xaa Trp Tyr Gln Xaa T
3323	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Xaa Val Tyr Trp Gln Xaa T
3337	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Xaa Gly Tyr Trp Gln Xaa T

VERIFICATION SUMMARY
PATENT APPLICATION **US/09/428,082**

Input Set: **I428082.RAW**

Line	?	Error/Warning	Original Text
3351	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Xaa Tyr Trp Gln Xaa T
3365	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Xaa Gly Tyr Trp Gln Xaa T
3403	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
3420	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
3436	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Xaa Gln Xaa T
3450	W	"N" or "Xaa" used: Feature required	Phe Ala Trp Thr Pro Gly Tyr Trp Gln Xaa T
3464	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Ala Pro Gly Tyr Trp Gln Xaa T
3478	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Val Pro Gly Tyr Trp Gln Xaa T
3492	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
3508	W	"N" or "Xaa" used: Feature required	Xaa Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
3524	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ala Trp Tyr Gln Xaa T
3540	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Xaa Trp Tyr Gln Xaa T
3592	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Val Tyr Trp Gln Xaa T
3608	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Xaa Gly Tyr Trp Gln Xaa T
3622	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Xaa Tyr Trp Gln Xaa T
3636	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Xaa Gly Tyr Trp Gln Xaa T
3662	W	"N" or "Xaa" used: Feature required	Xaa Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
3676	W	"N" or "Xaa" used: Feature required	Tyr Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
3690	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Val Pro Gly Tyr Tyr Gln Xaa T
3706	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ser Tyr Tyr Gln Xaa T
3722	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Asn Tyr Tyr Gln Xaa T
4159	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Arg Pro Leu Pro Pro Leu Pro X
4168	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Arg Pro Leu Pro Pro Ile Pro X
4177	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Arg Pro Leu Pro Pro Leu Pro X
4186	W	"N" or "Xaa" used: Feature required	Arg Xaa Xaa Arg Pro Leu Pro Pro Leu Pro X
4195	W	"N" or "Xaa" used: Feature required	Arg Xaa Xaa Arg Pro Leu Pro Pro Leu Pro P
4204	W	"N" or "Xaa" used: Feature required	Pro Pro Pro Tyr Pro Pro Pro Pro Ile Pro X
4213	W	"N" or "Xaa" used: Feature required	Pro Pro Pro Tyr Pro Pro Pro Pro Val Pro X
4222	W	"N" or "Xaa" used: Feature required	Leu Xaa Xaa Arg Pro Leu Pro Xaa Xaa Pro
4234	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Arg Pro Leu Pro Xaa Leu Pro
4249	W	"N" or "Xaa" used: Feature required	Pro Pro Xaa Xaa Tyr Pro Pro Pro Xaa Pro
4263	W	"N" or "Xaa" used: Feature required	Xaa Pro Pro Xaa Pro Xaa Lys Pro Xaa Trp L
4280	W	"N" or "Xaa" used: Feature required	Arg Pro Xaa Xaa Pro Xaa Arg Xaa Ser Xaa P
4289	W	"N" or "Xaa" used: Feature required	Pro Pro Val Pro Pro Arg Pro Xaa Xaa Thr L
4301	W	"N" or "Xaa" used: Feature required	Xaa Pro Xaa Leu Pro Xaa Lys
4315	W	"N" or "Xaa" used: Feature required	Xaa Xaa Asp Xaa Pro Leu Pro Xaa Leu Pro
4325	W	"N" or "Xaa" used: Feature required	Cys Xaa Xaa Arg Gly Asp Cys
4353	W	"N" or "Xaa" used: Feature required	Xaa Phe Xaa Asp Xaa Trp Xaa Xaa Leu Xaa X
5474	W	"N" or "Xaa" used: Feature required	Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
5476	W	"N" or "Xaa" used: Feature required	Gly Pro Xaa Xaa Xaa Xaa Xaa Xaa Thr Trp X
5478	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
5480	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
5482	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
5492	W	"N" or "Xaa" used: Feature required	Xaa Tyr Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa X
5494	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Thr Trp Xaa Xaa X
5496	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
5498	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
5518	W	"N" or "Xaa" used: Feature required	Cys Xaa Xaa Gly Pro Xaa Thr Trp Xaa Cys
5649	W	"N" or "Xaa" used: Feature required	Phe Lys Leu Xaa Xaa Xaa Gly Tyr Val Tyr L
5670	W	"N" or "Xaa" used: Feature required	Tyr His Xaa Leu Xaa Xaa Gly Tyr Met Tyr T

Line	?	Error/Warning	Original Text
5730	W	"N" or "Xaa" used: Feature required	Arg Xaa Glu Thr Xaa Trp Xaa
5740	W	"N" or "Xaa" used: Feature required	Arg Xaa Glu Thr Xaa Trp Xaa
5750	W	"N" or "Xaa" used: Feature required	Arg Gly Asp Gly Xaa
5760	W	"N" or "Xaa" used: Feature required	Cys Arg Gly Asp Gly Xaa Cys
5770	W	"N" or "Xaa" used: Feature required	Cys Xaa Xaa Arg Leu Asp Xaa Xaa Cys
5800	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Arg Gly Asp Xaa Xaa Xaa
5810	W	"N" or "Xaa" used: Feature required	Cys Xaa Cys Arg Gly Asp Cys Xaa Cys
5850	W	"N" or "Xaa" used: Feature required	Xaa Xaa Asp Asp Xaa Xaa Xaa Xaa
5860	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Asp Asp Xaa Xaa Xaa Xaa Xaa
5930	W	"N" or "Xaa" used: Feature required	Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
5932	W	"N" or "Xaa" used: Feature required	Pro Xaa Xaa Xaa Xaa Xaa Xaa Thr Trp Xaa X
5934	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
5986	W	"N" or "Xaa" used: Feature required	Cys Gln Xaa Arg Tyr Thr Asp Leu Val Ala I
5996	W	"N" or "Xaa" used: Feature required	Arg Lys Xaa Asn Xaa Xaa Trp Thr Trp Val G
6007	W	"N" or "Xaa" used: Feature required	Ala Glu Asn Trp Ala Asp Gly Glu Pro Asn A
6018	W	"N" or "Xaa" used: Feature required	Cys Xaa Xaa Xaa Tyr Thr Xaa Leu Val Ala I
6028	W	"N" or "Xaa" used: Feature required	Arg Lys Xaa Xaa Xaa Xaa Trp Xaa Trp Val G
6030	W	"N" or "Xaa" used: Feature required	Thr Xaa Glu
6039	W	"N" or "Xaa" used: Feature required	Ala Xaa Asn Trp Xaa Xaa Xaa Glu Pro Asn A
6049	W	"N" or "Xaa" used: Feature required	Xaa Lys Xaa Lys Thr Xaa Glu Ala Xaa Asn T
6068	W	"N" or "Xaa" used: Feature required	Xaa Xaa Asn Phe Phe Trp Lys Thr Phe Xaa S
7221	W	"N" or "Xaa" used: Feature required	Xaa Cys Lys Gly Phe Phe Ala Leu Ile Pro L
7261	W	"N" or "Xaa" used: Feature required	Xaa Cys Arg Ile Val Ile Arg Ile Arg Ile A
7276	W	"N" or "Xaa" used: Feature required	Xaa Cys Lys Pro Gly His Lys Ala Arg Pro H
7291	W	"N" or "Xaa" used: Feature required	Xaa Cys Arg Phe Ala Val Lys Ile Arg Leu A
7385	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa
7406	W	"N" or "Xaa" used: Feature required	Xaa Ser Xaa Leu Asn
7434	W	"N" or "Xaa" used: Feature required	Xaa Lys Lys Tyr Xaa Xaa Xaa
7518	W	"N" or "Xaa" used: Feature required	Ser Ile Xaa Asn
7530	W	"N" or "Xaa" used: Feature required	Lys Lys Tyr Leu Xaa
7572	W	"N" or "Xaa" used: Feature required	Xaa Lys Lys Tyr Leu
7584	W	"N" or "Xaa" used: Feature required	Xaa Lys Lys Tyr Leu
7596	W	"N" or "Xaa" used: Feature required	Lys Lys Tyr Xaa
7728	W	"N" or "Xaa" used: Feature required	Ser Ile Xaa Asn
7760	W	"N" or "Xaa" used: Feature required	Lys Lys Tyr Leu Xaa
7832	W	"N" or "Xaa" used: Feature required	Ser Ile Xaa Asn
7864	W	"N" or "Xaa" used: Feature required	Lys Lys Tyr Xaa
7906	W	"N" or "Xaa" used: Feature required	Lys Lys Tyr Leu Xaa
7968	W	"N" or "Xaa" used: Feature required	Xaa Cys Lys Lys Tyr Leu Cys
9176	W	"N" or "Xaa" used: Feature required	Thr Phe Val Tyr Trp Gln Pro Tyr Ser Ser H
9787	W	"N" or "Xaa" used: Feature required	Asn Xaa Xaa Trp Xaa Xaa Pro Tyr Ala Leu P
9837	W	"N" or "Xaa" used: Feature required	Ser Arg Ile Trp Xaa Xaa Pro Tyr Ala Leu P
9857	W	"N" or "Xaa" used: Feature required	Trp Gly Tyr Tyr Xaa Xaa Pro Tyr Ala Leu P
9877	W	"N" or "Xaa" used: Feature required	Val His Pro Tyr Xaa Xaa Pro Tyr Ala Leu P
9897	W	"N" or "Xaa" used: Feature required	Xaa Xaa Ile Trp Tyr Gln Pro Tyr Ala Leu P
10597	W	"N" or "Xaa" used: Feature required	Xaa Xaa Pro Tyr Gln Xaa Tyr Ala Leu Pro L
10631	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
10643	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
10667	W	"N" or "Xaa" used: Feature required	Phe Thr Trp Glu Glu Ser Asn Ala Tyr Tyr T
10715	W	"N" or "Xaa" used: Feature required	Xaa Xaa Gln Xaa Tyr Xaa Xaa Xaa

Line	?	Error/Warning	Original Text
10732	W	"N" or "Xaa" used: Feature required	Xaa Xaa Gln Xaa Tyr Xaa Xaa Xaa
10757	W	"N" or "Xaa" used: Feature required	Xaa Xaa Gln Xaa Tyr Xaa Xaa Xaa
10785	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Gln Xaa Tyr Xaa Xaa Xaa
10807	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
10829	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
10851	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
10902	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
10904	W	"N" or "Xaa" used: Feature required	Tyr Xaa Xaa Xaa Leu
11007	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
11029	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
11041	W	"N" or "Xaa" used: Feature required	Ala Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
11053	W	"N" or "Xaa" used: Feature required	Phe Ala Trp Thr Pro Gly Tyr Trp Gln Xaa T
11065	W	"N" or "Xaa" used: Feature required	Phe Glu Ala Thr Pro Gly Tyr Trp Gln Xaa T
11077	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Ala Pro Gly Tyr Trp Gln Xaa T
11089	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Ala Gly Tyr Trp Gln Xaa T
11101	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ala Tyr Trp Gln Xaa T
11113	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Ala Trp Gln Xaa T
11125	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Ala Gln Xaa T
11137	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa A
11149	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Gly Gly Tyr Trp Gln Xaa T
11163	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
11175	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Gly Tyr Trp Gln Xaa Tyr
11189	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Xaa Gly Tyr Trp Gln Xaa T
11204	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Xaa Tyr Trp Gln Xaa T
11218	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Xaa Trp Tyr Gln Xaa T
11232	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Xaa Gly Tyr Trp Gln Xaa T
11244	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Asn Tyr Trp Gln Xaa T
11258	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Val Tyr Trp Gln Xaa T
11270	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Val Pro Tyr Trp Gln Xaa T
11284	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
11298	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
11312	W	"N" or "Xaa" used: Feature required	Xaa Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
11324	W	"N" or "Xaa" used: Feature required	Tyr Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
11336	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Val Pro Gly Tyr Tyr Gln Xaa T
11348	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
11360	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ser Tyr Tyr Gln Xaa T
11372	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Asn Tyr Tyr Gln Xaa T
11384	W	"N" or "Xaa" used: Feature required	Ser His Leu Tyr Xaa Gln Pro Tyr Ser Val G
11396	W	"N" or "Xaa" used: Feature required	Thr Leu Val Tyr Xaa Gln Pro Tyr Ser Leu G
11408	W	"N" or "Xaa" used: Feature required	Arg Gly Asp Tyr Xaa Gln Pro Tyr Ser Val G
11420	W	"N" or "Xaa" used: Feature required	Asn Met Val Tyr Xaa Gln Pro Tyr Ser Ile G
11442	W	"N" or "Xaa" used: Feature required	Val Tyr Xaa Gln Pro Tyr Ser Val Gln
11454	W	"N" or "Xaa" used: Feature required	Thr Phe Val Tyr Trp Gln Xaa Tyr Ala Leu P
11468	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa X
11484	W	"N" or "Xaa" used: Feature required	Xaa Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa X
11498	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Xaa Gln Xaa T
11514	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Xaa Gln Xaa T
11528	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Xaa Tyr Gln Xaa T
11544	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Xaa Tyr Gln Xaa T
11560	W	"N" or "Xaa" used: Feature required	Phe Glu Xaa Thr Pro Gly Tyr Tyr Gln Xaa T

Input Set: **I428082.RAW**

Line	?	Error/Warning	Original Text
11576	W	"N" or "Xaa" used: Feature required	Phe Glu Xaa Thr Pro Gly Tyr Tyr Gln Xaa T
11590	W	"N" or "Xaa" used: Feature required	Xaa Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
11605	W	"N" or "Xaa" used: Feature required	Xaa Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
11637	W	"N" or "Xaa" used: Feature required	Arg Leu Val Tyr Xaa Gln Pro Tyr Ser Val G
11697	W	"N" or "Xaa" used: Feature required	Xaa Asn Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
11957	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Gln Xaa Tyr Ala Leu Pro Leu
11981	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
12004	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
12016	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
12030	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
12044	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
12058	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
12072	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ala Tyr Trp Gln Xaa T
12086	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ala Trp Tyr Gln Xaa T
12100	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ala Tyr Tyr Gln Xaa T
12112	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
12124	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
12136	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
12162	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Trp Gln Xaa T
12176	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Trp Tyr Gln Xaa T
12190	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Gly Tyr Tyr Gln Xaa T
12206	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ala Tyr Trp Gln Xaa T
12222	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ala Trp Tyr Gln Xaa T
12238	W	"N" or "Xaa" used: Feature required	Phe Glu Trp Thr Pro Ala Tyr Tyr Gln Xaa T
12440	W	"N" or "Xaa" used: Feature required	Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
12442	W	"N" or "Xaa" used: Feature required	Pro Xaa Xaa Xaa Xaa Xaa Xaa Thr Trp Xaa X
12444	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
12454	W	"N" or "Xaa" used: Feature required	Asp Leu Xaa Xaa Leu
13599	W	"N" or "Xaa" used: Feature required	Cys Leu Arg Ser Gly Xaa Gly Cys
13609	W	"N" or "Xaa" used: Feature required	Cys Xaa Xaa His Trp Gly Phe Xaa Xaa Cys
13619	W	"N" or "Xaa" used: Feature required	Cys Xaa Pro Xaa Cys
13804	W	Invalid/Missing Amino Acid Numbering	1 5 10